AMENDMENTS TO THE SPECIFICATION

Please make the following amendments to the Specification.

Replace paragraph 0086 with the following paragraph:

> The present invention discloses 3815 novel viral genes of the VGAM group of genes, which have been detected bioinformatically, as described hereinbelow with reference to Tables 1 and 2 <u>for VGAM1483</u>. Laboratory confirmation of 4 genes of the GAM group of genes is described hereinbelow with reference to Figs. 12 through 14.

Replace paragraph 0134 with the following paragraph:

> The present invention discloses 90656 novel viral genes of the GR group of genes, which have been detected bioinformatically, as described hereinbelow with reference to Tables 1 and 2 <u>for VGAM1483</u>. Laboratory confirmation of 3 genes of the GR group of genes is described hereinbelow with reference to Figs. 9A through 14.

Replace paragraph 0137 with the following paragraph:

> The present invention discloses a first plurality of novel genes referred to here as VGAM genes, and a second plurality of operon-like genes referred to here as GR genes, each of the GR genes encoding a plurality of VGAM genes. The present invention further discloses a very large number of known target-genes, which are bound by, and the expression of which is modulated by each of the novel genes of the present invention. Published scientific data referenced by the present invention provides specific, substantial, and credible evidence that the abovementioned target genes modulated by novel genes of the present invention, are associated with various diseases. Specific novel genes of the present invention, target genes thereof and diseases associated therewith, are described hereinbelow with reference to Tables 1 and 2 <u>for VGAM1483</u>. It is therefore appreciated that a function of VGAM genes and GR genes of the present invention is modulation of expression of target genes related to known diseases, and that therefore utilities of novel genes of the present invention include diagnosis and treatment of the abovementioned diseases. Fig. 10 describes various types of diagnostic and therapeutic utilities of novel genes of the present invention.

Delete paragraphs 0161-20715.

Following paragraph 20728, add the following table.

Table 1

```
GENE PRECURSOR    P-       GENE     G-      FOLDED PRECURSOR
     -SEQUENCE    SEQID   -SEQ     SEQ
                           ID

==== ==========  =====   =====    ==== ==============

GAM  GTGTGACGTG   37404  TGACA    37405   --    AG  - A   AACAC                   TT     CAG  TT
1483 AGTCTGATCC          AGCCT            TGA  CGTG  TC TG TCC    TGAACGCTTTCGTCG GTTT TCATG   CT  T
     GACGAGAGCG          AACAC            |||  ||||  || || |||    ||||||||||||||| |||| |||||   ||
     GCTTTCGTCG          TGAAC            ATT  GCAT  AG AC GGG    ACTTGCGAGAGCAGT CGAA AGTAC   GA  /
     TGTTTTTCAT          TTCA             AC   GA  T -   GCT--                   C    C     CA- CA
     GCAGCTTTTA
     CAGACCATGA
     CAAGCCTGAC
     GAGAGCGTTC
     ATCGGGGCAT
     GAAGTACGCA
     TTACAC
```

Following paragraph 20729, add the following table.

Table 2

```
GENE      TARGET     UTR SEQUENCE                     SEQID    BINDING-SITE
========  =========  === ========================= ========  =========================
GAM1483   C7         3'  TGATAGGCCTGAATGGAGCATT 37406      CAA         CGA
                         CA                                TGA     GCCTGA     GAGCGTTCA
                                                           |||     ||||||     |||||||||
                                                           ACT     CGGACT     CTCGTAAGT
                                                             ATC         TAC
GAM1483   DUSP5      3'  TGCAAGCCTGGTGACCACTCA  37407      A           ACGA  G
                                                           TG CAAGCCTG     GA CGTTCA
                                                           || ||||||||     || ||||||
                                                           AC GTTCGGAC     CT GTGAGT
                                                             _          CA___  G
GAM1483   ATP6V1F    3'  TGGCAAGCCTGGGGAGAG     37408      A          AC
                                                           TG CAAGCCTG  GAGAG
                                                           || ||||||||  |||||
                                                           AC GTTCGGAC  CTCTC
                                                             C          CC
GAM1483   DKFZP564C103 3'   TGATGGCCTGACGCTCTCTTCA 37409      CAA         AGAGCG
                                                           TGA     GCCTGACG       TTCA
                                                           |||     ||||||||       ||||
                                                           ACT     CGGACTGC       AAGT
                                                             AC_         GAGAG_
GAM1483   KIAA0561   5'  GATGAGCTTGACGAGAGGGT   37410      CA   C           C
                                                           GA   AGC TGACGAGAG GT
                                                           ||   ||| ||||||||| ||
                                                           CT   TCG ACTGCTCTC CA
                                                             AC   A         C
GAM1483   KIAA0935   3'  TGGCAAGCCTGGCAGGGC     37411      A         A G  A
                                                           TG CAAGCCTG C AG GC
                                                           || |||||||| | || ||
```

```
                                                          AC GTTCGGAC G TC CG
                                                            C          C _  C
GAM1483   MIC2L1    3'   GACAAGCCTGACAAAGTTCA   37412                   AGC
                                                          GACAAGCCTGACGAG    GTTCA
                                                          | | | | | | | | | | | | |    | | | | |
                                                          CTGTTCGGACTGTTT    CAAGT
                                                                         _____
GAM1483   PPP4R1L   5'   TGACAAGTCTGATGAAGAGCG   37413         C      C_
                                                          TGACAAG CTGA  GAGAGCG
                                                          | | | | | | | | | | | | | | | | |
                                                          ACTGTTC GACT  TTCTCGC
                                                                A    AC
GAM1483   ZAK       3'   TGACAAGCCAGATCAGTTC    37414          TGACG    GC_
                                                          TGACAAGCC    AGA    GTTC
                                                          | | | | | | | | |   | | |    | | | |
                                                          ACTGTTCGG     TCT    CAAG
                                                                 _____       AGT
GAM1483   LOC149566 3'   TGACAAGTTGGGTGAACGTT   37415         CC  ACGA
                                                          TGACAAG  TG    GAGCGTT
                                                          | | | | | | |  | |    | | | | | | |
                                                          ACTGTTC  AC    CTTGCAA
                                                                A_  CCA_
GAM1483   LOC150368 3'   TGGCAAGCCTGTGACAGTCTC  37416     A        AC  G  CG
                                                          TG CAAGCCTG  GA AG   TTC
                                                          | |  | | | | | | | |  | |  | |   | | |
                                                          AC GTTCGGAC   CT TC   GAG
                                                           C          A_  G  A_
GAM1483   LOC255718 5'   TGACAGGCCTGAGGGTCC     37417          A      CGAGA  C
                                                          TGACA GCCTGA     G GTTC
                                                          | | | | | | | | | | |       |  | | | |
                                                          ACTGT CGGACT      C CAGG
                                                                    C_____  C
```

Delete paragraphs 20730-57115 and 57131-81271.

Delete the 9720 page-long tabular section at the end of the specification.

Delete Tables 1 and 2, which were submitted on compact disc.